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## U.S. PATENT DOCUMENTS \*Examiner Filing Date Initial Document Number Date Name Class Subclass If Appropriate 4,579,955 01/04/86 Lammerant et al 22/02/83 9998 4,771,074 13/09/88 Lammerant et al 23/10/88 4,067,999 10/01/78 Glabe et al 02/05/77 4,351,835 28/09/82 Stanko 01/04/81 4,363,815 14/12/82 Yu et al 30/04/80

5,348,979 20/09/94 Nissen et al 23/12/92 17/02/98 Veech 5,719,119 26/04/93 5,654,266 05/08/97 Chen et al 28/03/94 5,292,774 08/03/94 Hiraide et al 27/04/93 4,997,976 05/03/91 Brunengraber et al 15/11/88 30/01/92 5,126,373 Brunengraber et al 06/12/90 5,116,868 26/05/92 Chen et al 03/05/89 4,346,107 24/08/82 Cavazza et al 09/02/80 4,929,449 29/05/90 Veech 17/12/86 5,200,200 06/04/93 Veech 16/04/90 5,912,269 15/01/99 Tung 30/04/96 5,100,677 31/03/92 Veech 17/12/86 4,983,766 08/01/91 Imwinkelried et al 23/12/88 4,970,143 13/11/90 Guidoux et al 14/08/86 4,701,443 20/10/87 Nelson et al 22/03/83 5,693,850 02/12/97 Birkhahn et al 06/06/95 92961 4,234,599 18/11/80 Van Scott et al 04/10/78

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INFORMATION DISCLOSURE CITATION

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		FOREIG	N PATENT DOCUMENTS			1	
	Document Number	Date	Country	Class	Subclass	Transl. Yes	ation No
arra	0780123	22.11.1996	EP	0.435	Succius	163	110
	0562188	27.03.1992	EP				
	0318357	15.11.1988	EP				
	WO 98/51812	12.05.1998	PCT		<del>                                     </del>		
	WO 99/34687	07.01.1999	PCT		<del> </del>		
	0108820	10.11.1982	EP				
	0288908	21.04.1988	EP				
	0466050	05.07.1991	EP				
	WO 92/09211	21.11.1991	PCT				
\	WO 92/09210	21.11.1991	PCT		-		
	WO 98/41201	17.03.1998	PCT				
1	0552896	15.01.1993	EP				
9787	2126082	12.08.82	GB				
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	OTHER DOCU	MENTS (Incl	uding Author, Title, Date, Per	tinent Pages	, etc.)	<del></del>	

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	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)
4000	"Biopolymers and -oligomers of (R)-3-Hydroxyalkanoic Acids - Contributions of synthetic Organic Chemists": D Seebach et al; Ernst Schering Research Foundation; 1995
	"Biodegradation of cyclic and substituted linear oligomers of poly(3-hydroxybutyrate)"; Helmut Brandl et al: Can. J. Microbiol 41(Suppl. 1); 1995; Pages 180-186
	"Direct degradation of the biopolymer poly[(R)-3-hydroxybutyric acid] to (R)-3-hydroxybutanoic acid and its methyl ester"; D Seebach et al; Org. Synth. 71; 1992; Pages 39-47
	"Cyclische Oligomere von (R)-3-Hydroxybuttersäure: Herstellung und strukturelle Aspekte"; von Dietmar et al; Helvetica Chimica Acta; Vol 76; 1993; Pages 2004-2016
	"Poly(hydroxyalkanoates): A Fifth Class of Physiologically Important Organic Biopolymers?"; Hans-Martin Müller et al: Angew. Chem.; 1993
	"Intractable epilepsy"; Avinoam Scuper et al; The Lancet, Vol 353; April 10, 1999; Page 1238
	"Energy Metabolism and the Regulation of Metabolic Processes in Mitochondria"; R L Veech et al; Academic Press; 1972; Pages 170-183
	"Nontoxic Amyloid β Peptide <sub>1-2</sub> suppresses Acetylcholine synthesis"; Minako Hoshi et al; The Journal of Biological Chemistry; Vol. 272, No. 4; January 1997; Pages 2038-2041
	"Alternate Fuel Utilization by Brain"; George F Cahill Jr et al; Cerebral Metabolism and Neural Function; Williams & Wilkins, London; Pages 234-242
	"Preparation and Structure of Oligolides from (R)-3-Hydroxypentanoic Acid and comparison with the Hydroxybutanoic-Acid Derivatives: A Small Change with Large Consequences"; Dieter Seebach et al; Helvetica Chimica Acta – Vol. 77; 1994; Pages 2007 – 2033
	"The Triolide of (R)-3-Hydroxybutyric acid – Direct Preparation from Polyhydroxybutyrate and Formation of a Crown Estercarbonyl Complex with Na Ions"; Dieter Seebach et al; Angew. Chem. Int.; 1992; Pages 434-435
	"Ketone bodies as substrates"; A J Rich; Proceedings of the Nutrition Society, Vol. 49; 1990; Pages 361-373
	"The Dimer and Trimer of 3-Hydroxybutyrate Oligomer as a Precursor of Ketone Bodies for Nutritional Care"; Osamu Tasaki et al; Journal of Parenteral and Enteral Nutrition, Vol. 23, No. 6; 1999; Pages 321-325
	"Effect of 3-hydroxybutyrate in obese subjects on very-low-energy diets and during therapeutic starvation"; G L S Pawan et al; The Lancet; January 1983; Pages 15-17
	"The untoward effects of the anoins of dialysis fluids"; R L Veech et al; Kidney Internation, Vol 34; 1988; Pages 587-597
HAR	"Transport of poly-β-hydroxybutyrate in human plasma"; Rosetta N. Reusch et al; Biochimica et Biophysica Acta 1123: 1992; Pages 33-40

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Examiner (	Lamo	Mum	Date Considered //	112/01	

E iner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	April 30, 2001	
(Use several sheets if necessary)	EII DIC DATE	CDOLD

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) "Human xenobiotic metabolizing esterases in liver and blood"; N W McCracken et al; Biochemical Pharmacology Vol. 46, No. 7; 1993; Pages 1125-1129 "Detection, synthesis, structure, and function of oligo(3-hydroxyalkanoates): contributions by synthetic organic chemists"; Dieter Seebach et al; International Journal of Biological Macromolecules 25; 1999; Pages 217-236 "Poly(hydroxyalkanoates): A Fifth Class of Physiologically Important Organic Biopolymers?" Hans-Martin Müller et al; Angewandte Chemie Vol. 32, No. 4; April 1993; Pages 477-502 "The toxic impact of parenteral solutions on the metabolism of cells: a hypothesis for physiological parenteral therapy"; R L Veech et al; The Americal Journal of Clinical Nutrition 44; October 1986; Pages 519-551 "Association between features of the insulin resistance syndrome and Alzheimer's disease independently of apolipoprotein E4 phenotype: cross sectional population based study"; Johanna Kuusisto et al; BMJ Vol. 315; 25 October 1997; Pages 1045-1049 "Novel calcium ion channel is a pore without protein"; Karen Hopkin; The Journal of NIH Research Vol. 9; November 1997; Pages 25-26 "Physiological Roles of Ketone Bodies as Substrates and Signals in Mammalian Tissues"; Alison M Robinson et al; Physiological Reviews Vol. 60, No. 1; January 1980; Pages 143-153 "Proof for a nonproteinaceous calcium-selective channel in Escherichia coli by total synthesis from (R)-3-hydroxybutanoic acid and inorganic polyphosphate"; Sudipto Das et al; Proc. Natl. Acad. Sci. USA Vol. 94; August 1997; Pages 9075-9079 "New clues to Alzheimer's disease: Unraveling the roles of amyloid and tau"; Bruce A Yankner; Nature Medicine Vol 2, No. 8; August 1996; Pages 850-852 "An intracellular protein that binds amyloid-\$\beta\$ peptide and mediates neurotoxicity in Alzheimer's disease"; Shi Du Yan et al; Nature, Vol 389; 16 October 1997; Pages 689-695 "Alternate Fuel Utilization by Brain"; George F Cahill, Jr et al; Cerebral Metabolism and Neural Function; Williams & Wilkins; Chapter 26, Pages 234-242 "Blood-Brain Barrier Transport of Metabolic Substrates"; William H Oldendorf; Cerebral Metabolism and Neural Function; Williams & Wilkins; Chapter 15, Pages 127-132 "β-hydroxybutyrate suppresses pentylenetetrazol (PTZ) - induced seizures in young adult rats"; Sarah Lustig et al; Epilepsia, Vol. 39, Suppl. 6; 1998; 2.020; Page 36 "β-hydroxybutyrate potentiates gaba<sub>A</sub>-mediated inhibitory postsynaptic potentials in immature hippocampal CA1 neurons"; Shundi Ge et al; Epilepsia, Vol. 39, Suppl. 6; 1998; E.06; Page 135 "The effect of ketone bodies, β-hydroxybutyrate, and acetoacetate on acute seizure activity in hippocampal CA1 neurons"; Charles E. Niesen et al; Epilepsia, Vol. 39, Suppl. 6; 1998; 2.015; Page

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**Examiner:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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April 30,2001

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910YC	***	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  "Biologica-Chemical preparation of 3-hydroxycarboxylic acids and their use in EPC-syntheses"; Dieter Seebach et al; Laboratorium für Organisch Chemie der Eidgenössischen Technischen Hochschule; Pages 85-126
		"Dietary Nonprotein calories and cerebral infarction size in rats"; Claudia Robertson et al; Stroke, Vol. 23, No.4; April 1992; Page 564-568
		"Hypoxia and β-hydroxybutyrate acutely reduce glucose extraction by the brain in anesthetized dogs"; Albert S Y Change et al; Can J Phyiol Pharmacol, Vol. 71; 1993; Pages 465-472
		"γ-Hydroxybutyrate: Cerebral metabolic, Vascular, and Protective effects"; Alan A Artru et al; J Neurochem, Vol. 35, No. 5; 1980; Pages 1114-1119
		"Effect of sodium hydroxybutyrate on the cerebral circulation and regional vasomotor reflexes"; E A Bendikov et al; Plenum Publishing Corporation; 1980; Pages 1287-1292
		"Oxidative metabolism deficiencies in brains of patients with Alzheimer's disease"; S Hoyer; Acta Neurol Scand, Suppl. 165; 1996; Pages 18-24
		"The ins and outs of amyloid-β"; Konrad Beyreuther et al; Nature, Vol. 389; 16 October 1997; Pages 677-678
		"Metabolism of (R,S)-1,3-butanediol acetoacetate esters, potential parenteral and enteral nutrients in conscious pigs"; Sylvain Desrochers et al; The American Physiological Society; 1995; Pages 660-667
		"The Gibbs-Donnan Near-equilibrium System of Heart"; Takashi Masuda et al; The Journal of Biological Chemistry, Vol. 265, No. 33; 25 November 1990; Pages 20321-20334
		"Nutritional and metabolic studies in humans with 1,3-butanediol"; Richard B Tobin et al; Federation Proceedings Vol. 34, No. 12; November 1975; Pages 2171-2176
		"Utilization of 1,3-Butanediol and Nonspecific Nitrogen in Human Adults"; Constance Kies et al; Nebraska Agriculture Research Station Journal No. 3489; Pages 1155-1163
		"Alzheimer's Disease: Genotypes, Phenotype, and Treatments"; Dennis J Selkoe; Science, Vol. 275; 31 January 1997; Pages 630-631
		"The β/α Peak Height Ratio of ATP"; Kieran Clarke et al; The Journal of Biological Chemistry, Vol. 271, No. 35, 30 August 1996; Pages 21142-21150
		"Control of Glucose Utilization in Working Perfused Rat Heart"; Yoshishiro Kashiwaya et al; The Journal of Biological Chemistry, Vol. 269, No. 41; 14 October 1994; Pages 25502-25514
		"Regulation of mitochondrial pyruvate dehydrogenase activity by tau protein kinase I/glycogen synthase kinase 3β in brain"; Minako Hoshi et al; Proc Natl. Acad. Sci. USA, Vol. 93; April 1996; Pages 2719-2723
		"Stress and Glucocorticoid; Rachel Yehuda; Science, Vol. 275; 14 March 1997; Pages 1662-1663
<del>-</del>		"Nontoxic Amyloid β Peptide <sub>1-42</sub> Suppresses acetylcholine synthesis"; Minako Hoshi et al; The Journa of Biological Chemistry, Vol. 272, No. 4; 24 January 1997; Pages 2038-2041
HH		"Metabolic engineering and human disease"; Martin L Yarmush et al; Nature Biotechnology, Vol. 15; 15 June 1997; Pages 525-528

miner Date Considered 1//19/07

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE CITATION

APPLICANT R L VEECH

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April 30, 2001

(Use several sheets if necessary) FILING DATE GROUP

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)
HAR	"Metabolism of R- and S-1,3-butanediol in perfused livers from meal-fed and starved rats"; Sylvain Desrochers et al; Biochem. J. Vol. 285; 1992; Pages 647-653
	"Metabolism of 2,3-Butanediol Stereoisomers in the Perfused Rat Liver"; Jane A Montgomery et al; The Journal of Biological Chemistry, Vol. 268, No. 27; 1993; Pages 20185-20190
	"Nutritional and metabolic studies in humans with 1,3-butanediol"; Richard B Tobin et al; Federation Proceedings Vol. 34, No. 12; November 1975; Pages 2171-2176
	"Metabolic effects of a D-β-hydroxybutyrate infusion in septic patients: Inhibition of lipolysis and glucose production but not leucine oxidation"; Michel Beylot et al; Critical Care Medicine, Vol. 22, No. 7; July 1994; Pages 1091-1098
	"Hyperinsulinaemia and Alzheimer's Disease"; George Razay et al; Age and Ageing; 1994; Pages 398-399
	"Peripheral glucose metabolism and insulin sensitivity in Alzheimer's disease"; Kilander et al; Acta Neurol Scand; 1993; Page 294-298
	"Effect of Sodium Hydroxybutyrate of the cerebral circulation and regional vasomotor reflexes"; Bendikov et al; Byulleten' Eksperimental'noi Biologii i Meditsiny, Vol. 88 No. 11; November 1979; Pages 555-557
	"Tau protein Mutations confirmed as neuron killers"; Gretchen Vogel; Science, Vol. 280; 5 June 1998; Pages 1524-1525
	"Diagnosing dementia with Lewy bodies"; Ian G McKeith et al; The Lancet, Vol. 354; 9 October 1999; Pages 1227-1228
	"R,S-1,3-butanediol acetoacetate esters, potential alternates to lipid emulsions for total parenteral nutrition"; Sylvain Desrochers et al; Nutritional Biochemistry Vol. 6; 1995; Pages 111-118
	"Substrate signaling by insulin: a ketone bodies ratio mimics insulin action in heart"; Yoshihiro Kashiwaya et al; The American Journal of Carliology, Vol. 80 (3A); 4 August 1997; Pages 50-64
	"Insulin, ketone bodies, and mitochondrial energy transduction"; Kiyotaka Sato et al; The FASEB Journal, Vol 9; May 1995; Pages 651-658
	"Regulation of GABA Level in Rat Brain Synaptosomes: Fluxes through enzymes of the GABA shunt and effects of glutamate, calcium, and ketone bodies"; Maria Erecińska et al; Journal of Neurochemistry, Vol. 67, No. 6; 1996; Pages 2325-2334
nor	"The Metabolism of Acetone in Rat"; Joseph P Cassazza et al; The Journal of Biological Chemistry, Vol. 259, No. 1; 10 January 1984; Pages 231-236
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Examiner (Lamo Muma Date Considered 11/19/6)

**Examiner**. Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.